

POWER AMPLIFIER WITH DISTRIBUTED CAPACITOR

Abstract

A power amplifier integrated circuit includes a plurality of hetero-junction bipolar transistors having a plurality of bases, a plurality of ballast resistors, and a capacitor. Each ballast resistor is connected between a base of the transistor and a DC node to which a DC voltage is applied. The capacitor is connected between an RF node, which supplies an RF signal, and the plurality of bases of the transistors. The capacitor provides a distinct path for the RF input signal having a substantially high capacitance, so that the RF input signal does not suffer significant signal loss.